on a skimmed milk diet. On the other hand, we have a class of cases we call the "starch" type; very pale, showing blue rings under the eyes, having abdominal pain and often an enuresis.

On examination of the stools, we find a quantity of undigested starch granules, and a report of the dietary shows the child has been living on cereals, milk, and a considerable amount of fresh bread and cake between meals. In the majority of these cases a proper non-starch diet, with iron and gray powder, regulates the condition, and the improvement is rapid.

In conclusion, I would say that much of the intestinal disturbances in young children could be avoided if the family physician would give the mothers definite rules in writing as to proper food, and definite intervals of feeding.

DIETETICS FROM A MODERN STAND-POINT.*

By ANNIE W. WILLIAMS, M. D., Hayward.

In this age of searching analysis keen observation, thorough research, extensive and exhaustive laboratory experiments, practical demonstrations and laborious investigations, dietetics, the science or study and regulation of the diet, has not been overlooked, but has received its full and much needed share of attention. World-wide questioning is being directed to the disquieting fact that eating just for self-gratification, the good taste and flavor, because you happen to like it, and to satisfy a pampered, over-cultivated and ofttimes more or less perverted appetite, is possibly not all it should be.

We, the members of the medical profession, are many of us overlooking and disregarding some very vital facts concerning diet. Not the diet of the few but the diet of to-day civilization. Twentieth century scientists have painstakingly compiled for our consideration a reliable array of valuable facts that can be immediately adopted for practical use in every-day prescribing.

Dietetics considered from a modern standpoint not only takes into account the food units, food values and nutritive values of foodstuffs but also considers their medicinal values, which furnishes a fascinating field of study and research. In the near future the medical profession will be able to compute not only the nutriment values, the nourishing and sustaining values of the diets that they are prescribing but also just what medicinal values, if any, with the estimated dosage.

Take the yolk of an egg, for instance; it is a most perfect natural emulsion containing in solution or suspension several important and well-known drugs which physicians are daily prescribing. Iron, which has heretofore been supplied to the medical profession from the mineral kingdom, is now being prescribed in some cases by giving the patient the vegetables in which iron is found. The iron as contained in the vegetable is in such

* Read before the Forty-Second Annual Meeting of the State Society, Del Monte, April, 1912.

a form that it is readily assimilated by the human system and without any of the disturbing effects often following the administration of metallic iron.

Modern dietetics admonish us that the juice of lemons is to be preferred to vinegar and that the sub-acid fruits are very helpful to a certain class of patients. We are enjoined not to let a day pass without eating something in the way of raw food and are informed that honey is a storehouse of energy and a natural laxative.

In the way of raw foods may be mentioned: a stalk of celery, a crisp young carrot, fresh letture, a quickly grown white turnip, a crisp cucumber, mild, sweet, green onions, and other raw foods too numerous to mention. The amount of painstaking scientific investigation and research that has been accomplished and published along the lines of foods, food values and nutritive values of foodstuffs is truly amazing to the uninformed mind upon this particular phase of diet. Stokes & Co. of New York make a specialty of publishing and supplying a goodly number of publications including the more recent up-to-date works upon this subject.

At all the world's great seats of learning and universities and research laboratories much time, expense, labor and laboratory space has been devoted to the scientific study and searching investigation of food materials and food stuffs, including practical demonstrations on human squads, and the man in the box, and other exhaustive experiments; which on the whole have furnished more or less satisfactory enlightenment upon this subject. The sum total of knowledge thus acquired, and sifted out, being of undoubted scientific and practical value.

In my last trip across the continent I noted that all our American universities are taking a most prominent part in these nutritive investigations. Our own state university is very much up-to-date in this line of work and most valuable information and data may be obtained from the professors and the investigators engaged in this work there. It has been stated by an eminent Russian investigator, Mr. Smolensky, that more has been accomplished in ten years in the United States than could have been done in Germany in fifty years.

In many public libraries books treating of these subjects are now to be found; notably in Berkeley public library, where the works of some of the most noted writers upon these subjects are to be found on the shelves. The modern physicians who desire to be well equipped and not out-of-date will realize the deep importance of informing themselves upon these modern phases of dietetics which are making such rapid advances and remarkable strides forward.

It makes one rub one's eyes to learn that those severe twinges and dull aches in the shoulder muscles which have been duly scheduled under the convenient and all-inclusive name of rheumatism, may be due instead to a parasite that we take into our system with the pork that we find so delicious and satisfying. It has been discovered, and even depicted upon moving picture

screens, that these parasites choose as their favorits habitat in the human body the shoulder muscles, where they locate and become domesticated. This is to be thought of the next time your patient bitterly complains of persistent so-called rheumatic pains in the region of the shoulder which the customary treatment and usual medicines have failed to relieve.

Then there is the caffeine to be considered which we so innocently imbibe in our favorite table beverages. It is being strongly urged that its continuous, continued use will set up a train of ailments which if persisted in will in some cases become threatening and serious. When one is warned by an incipient insomnia or an interference with digestion the best plan would be to discontinue these customary table beverages at once.

Alcohol has lost its prestige and is being tabooed to its place among the other well-known narcotic poisons, by the findings of science, by all well informed physicians and by all those who have been properly instructed in regard to the scientifically proven narcotic action of alcohol.

The subject of modern dietetics is becoming of such definite and decided interest to the universal, general public and to humanity in general, that the leading magazines and papers are devoting valuable space with most prominent headlines to the subject. For instance, The London Lancet gives emphasis to the fact that port wine contains tannin and is thus unsuited to many constitutions and that walnuts besides containing 63 per cent. fat and nearly 13 per cent. of protein also contain tannins and thus disagree with some constitutions.

These instances might be multiplied and they serve to prove the world-wide universal interest in the public mind, that is being shown in modern dietetics, the wide-reaching scope of that interest, and the intelligent nature of it. Formerly we demanded that our food should appeal to us. At the present time we are not quite so well satisfied unless it also furnishes us with an all-around nourishing sustenance.

We have been demanding in a rather telling way that our flour should make pretty and attractive loaves of bread, and consequently the wheat kernel was necessarily divested of some of its vital nourishment, that it might furnish a whiter shade of flour. Another almost naturally perfect, wholesome article of diet, rice, had to undergo polishing to render it more attractive in appearance. This process of polishing robbed the rice of its proteid constituent. In the modern diet unpolished rice is returning to favor and many of us have learned to purchase the unpolished rice exclusively. Very fortunately the potato, another almost perfect all-around article of diet, with its peeling as a protective coat escaped the beautifying treatment and reached our tables in its natural state. Most of us in eating this delicious tuber and prime favorite of the vegetable kingdom, add a little butter and this addition makes up for the fatty constituent in which the potato is normally lacking.

A sweeping edict of modern dietetics has doomed the frying pan, that universal favorite utensil of the culinary art. No longer need housewives fry themselves as well as the viands, in order to appease the hungry members of their household.

This is an age of moderninity, individuality, and individual thinking. Established customs and usages no longer hold an unquestioned grip on things universal. The why and wherefore are being sought, individually and collectively, and most eagerly sought. The world has turned the searchlight of rigid investigation upon the subject of food and food effects and the resultant conditions. Health and diet have become a topic of paramount importance. Modern dietetics takes note of the undeniable truth contained in that terse but illuminating passage, "Man does not live by bread alone." It recognizes the fact that mankind is a creature of complexity, composed of physical, mental and spiritual factors so intimately intertwined and interwoven as to produce more or less of a failure whenever any of his triune faculties are overlooked or neglected.

No matter how exact and scientifically correct the prescribed diet may be, to obtain the desired results which above everything else is what both the physician and patient are seeking, all these contributing and ameliorating conditions must be taken into account. Mankind when created was placed in the all-pervading fresh air, the dome of the sky with all the glories of its diurnal changes above him, the earth with its interchanging seasons beneath his feet and the beauties of nature all about him.

In his strenuous endeavor to improve conditions mankind built four walls. At first the walls were mere skeletons and not four in number but presently they were increased to four forming a complete enclosure and gradually becoming stronger, firmer and thicker, until it became necessary to break holes in them to admit the air. In the progress of events doors and then windows were devised and as a crowning achievement panes of glass were made and fitted into the windows. The windows were tightly battened and the doors locked and at last mankind was securely shut away from his natural and intended environment. He complacently set himself down and endeavored to bring up his progeny under these alien and unnatural conditions. The fresh air could not reach them except in scant supply, the sun was prevented from shining upon them, the blue of the heavens with all the splendors of the sun, moon and stars, clouds, fogs and mists, was roofed out from them, their feet were carefully shod and faithfully kept from treading mother earth and all the beauties of nature were mostly shut out from their view.

Many unknown and unheard-of diseases became fastened upon mankind, all of which are classed under the head of the so-called house-diseases, notable among which are dyspepsia and tuberculosis or the white plague. Results have unmistakably proven that house life versus out-door life is a disastrous failure and that mankind has deteriorated markedly.

Mankind is evolving from the period of searching experiment and rigid investigation as to the effects of feeding and housing upon domestic animals into the period of similar searching and rigid examination as to the effects of feeding and housing upon the human and is obtaining the same successful and satisfactory results. The fact has dawned upon mankind that they have made some egregious blunders in their endeavor to improve upon normal mundane conditions and now the word has gone forth, uttered with an insistent meaning, "Back to the great outdoors" and mother earth and natural modes of living.

In a recent lecture on the "American Mind" the noted speaker said, "intellectually the American is inclined to radical views, but he has a great deal of practical conservatism. There is in fact conservatism in our blood and radicalism in our brains, and now one and now the other rules."

In this question of dietetics one need not be too radical or unduly conservative but rather choose a middle course and adapt the diet to the individual need. We are not compelled to follow the most radical and live exclusively upon raw foods though they are of undoubted merit and deserving of careful consideration, or is it necessary to confine the diet to just one article, although this is helpful to some cases for a certain time. Neither need we be so very conservative as to refuse to accept the findings of science as regards these nutritive investigations, as to the most desirable diet for health, efficiency and endurance.

The fact of the matter is, mankind the world over is not only accepting the teachings of science on dietetics as rapidly as they can readily assimilate them, but they are eagerly seeking out for themselves all the facts and information that is attainable. They evidently agree with Emerson who says, "Get health, no labor, pains nor exercise that can gain it must be grudged."

In closing this paper may I urge upon the medical profession as a whole that they give their most earnest thought and careful attention to this more recent modern phase of the subject of dietetics.

Discussion.

Dr. D'Arcy Power, San Francisco: I am sorry that the subject of dietetics has not been more fully represented in the program of this meeting. There are many points on which we are still partially informed and among these one of the most recently brought forward is the fact that there is not a strict relation between caloric values and nutritive values. That is to say, there are foods having the same caloric values which when applied to actual feeding of live stock give very different results in the actual nutrition of the animals fed thereon. Furthermore, I have a strong belief that some of our constants are not always reliable. Thus it is usually assumed that a calory diet of less than 1500 calories per day must necessarily be insufficient to maintain equilibrium, but personal observation convinces me that there are abnormal people who maintain their weight on a dietary of smaller calory value than this. Lastly I would like to point out that Dr. Williams' remarks about coffee are not borne out by recent experimentation as it has been shown that coffee is capable of stimulating and improving

both mental and physical work without a negative phase.

Dr. Annie W. Williams: I consider that the difference between my statement in regard to the use of caffeine and that of Dr. Powers, who so kindly and ably discussed my paper, lies in the fact that the statement I make in the paper refers to the continued, continuous use of caffeine for not only days and weeks but for months and months and years and wears in our table beverages. Dr. Powers' statement I believe would refer more particularly to its drug effect as a tonic drug. I will now close the discussion, thanking you for the manifest interest and attention accorded to my paper.

A RECENT CASE OF LIPECTOMY.*

By H. EDWARD CASTLE, M. D., San Francisco.

In presenting this case I am showing you not an unusual form of deformity. Truly it may be called a deformity when adipose tissue increases in a localized area to such an extent that the body is so ill proportioned. The treatment I shall mention, while not entirely rare, is far less common than it should be. With the beneficial results I have obtained with lipectomy I feel this statement is not too dogmatic.

The lady, a private patient, has been so kind in permitting herself to be photographed and other

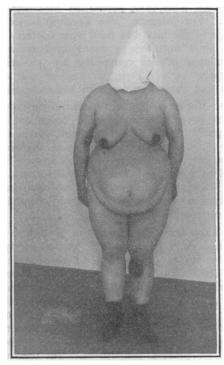


Figure I

publicity would be so embarrassing I felt it improper to ask her to come before you this evening, therefore I shall present the case by lantern slide demonstration which I feel will depict her condition before and after operation to your entire satisfaction.

^{*}Presented before the Surgical Section of the San Francisco County Medical Society, June 18, 1912.